

**2003 PROP 13 COASTAL NONPOINT SOURCE
INVENTORY OF TARGETED IMPLEMENTATION PROJECTS**

**North Coast Region – R1
Implementation**

Project Identification Number	Project Description	Geographic Area/Watershed	Management Measures	Watershed Restoration Action Strategy
R1-1	Salmonid habitat/aquatic species education for agencies, organizations, landowners and private organizations	Regionwide	6D	
R1-2	Bioengineering education for agencies, organizations, landowners and private organizations	Regionwide	5.4A	
R1-3	Heavy equipment operation training for restoration and road work, and technology transfer to organizations and landowners	Regionwide	2L	
R1-4	Landowner outreach and education for road decommissioning/storm-proofing/maintenance	Regionwide	2L	
R1-5	Stakeholder education and outreach on cumulative effects of water withdrawals (diversions) from tributaries;	Regionwide		
R1-6	Training for fire managers for water quality protection	Regionwide	2L	
R1-7	Burn Area Emergency Rehabilitation technology transfer	Regionwide	2L	
R1-8	Provide education and outreach to urban citizens and stream side property owners on nonpoint source pollution, especially from septic systems and pesticide and fertilizer use	Regionwide	1G	
R1-9	“Shrimp Club” type education/outreach/restoration	Regionwide	6D	
R1-10	Technology transfer for vineyard installation, education and outreach; changes to BMPs and innovative technology for vineyards on slopes >30% and adjacent to water courses	Russian/Bodega WMA, North Coast Rivers	1A, 1G	Navarro River Restoration Plan, Noyo River TMDL& Implementation Recommendations Garcia River Waste Reduction Strategy, Southwest Santa Rosa Area Plan,

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				Stemple Creek Waste Reduction Strategy, Waste Reduction Strategy for Laguna de Santa Rosa, Mattole Restoration Council Elements of Recovery
R1-11	Form partnerships with public agencies, organizations, and stakeholders to plan, implement, and monitor projects	Regionwide		
R1-12	Promote the coordination of Klamath River and Trinity River dam releases to maximize beneficial uses	Trinity River, Klamath River	5.2C	Klamath River Task Force Trinity River Task Force
R1-13	Rehabilitate abandoned mines to improve water quality; address abandoned mine dam failures to prevent/control sediment releases; monitor water quality downstream from abandoned mines(especially for mercury); restore riparian habitat and function to river reaches affected by mine tailings	Trinity River Shasta River Scott River Salmon River		Named above
R1-14	Address abandoned mine dam failures to prevent/control sediment releases	Shasta River	5.2A	Shasta Valley CRMP
R1-15	Protect/restore/enhance historic flood plains	Regionwide	5.1B	
R1-16	Stream restoration, road restoration/retirement or other erosion/sedimentation reduction activities, especially where TMDLs are established	Regionwide	3.5A, 3.5E, 3.5F, 5.1A, 5.1B, 5.3A, 6A,6B	
R1-17	Inventory of roads (logging, rural, and residential) <u>and</u> needed road improvements	Regionwide	3.5A, 3.5E, 3.5F	
R1-18	Implement BMPs to prevent/reduce contaminated runoff from horse and cattle operations; implement pasture rotation for erosion and nutrient control; recycle agricultural waste including dairy waste to reduce pathogen and nutrient loading to surface and ground water; develop alternative stock watering systems including pond development; construct livestock fencing to protect riparian areas	Regionwide (Mark West Creek, Stemple Creek, Salmon Creek, Russian River, Garcia River, Humboldt Bay tributaries, Shasta River, South Fork Trinity River, Scott River)	various	Named above plus Scott River CRMP So. Fork Trinity CRMP
R1-19	Implement program to reduce the amount of water used by agriculture either through increased efficiencies or land acquisitions	Scott River, Shasta River	1F	Named above

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R1-20	Alternative water diversion demonstrations to reduced the impact from irrigation and non-irrigation situations;	Regionwide	1F	
R1-21	Improve irrigation tail water recovery to reduce nonpoint source pollution and water consumption	Shasta River, Scott River	1F	Named above
R1-22	Pipe or line irrigation diversion ditches to increase stream flows	Scott River, So. Fork Trinity, Salmon River, Shasta River	1F	Named above
R1-23	Implement agricultural practices to reduce pesticides in surface waters	Regionwide	1A, 1D, 1G	
R1-24	Recycle agricultural waste including dairy waste to reduce pathogen and nutrient loading to surface and ground water	Russian/Bodega WMA	1B, 1C	
R1-25	Sediment and stream channel monitoring including Vstar	Regionwide		
R1-26	Monitor urban creeks for nutrients, CTR pollutants, and bacterial loading characteristics	Humboldt Bay and tributaries		
R1-27	“All party” monitoring for upslope risk assessment and mitigation effectiveness monitoring for timber harvesting	Regionwide	2A	
R1-28	Implement flow monitoring and availability of flow gauges	Regionwide		
R1-29	Conduct temperature and nutrient baseline sampling and modeling to analyze limiting water quality conditions and predict impacts of different flow regimes	Klamath River		Klamath River Task Force
R1-30	Conduct bacteriological sampling in summer recreation areas with emphasis on QA/QC	Regionwide Russian River Ocean beaches Eel River basin		
R1-31	Baseline monitoring for water quality to include bacteria, oil, grease, fuels, nutrients, sediment/turbidity, storm water and waste water, and fish, macroinvertebrate, and shellfish populations	Coastal estuaries and streams		
R1-32	Water quality monitoring for TMDL implementation including reference/control subwatershed monitoring, and effects on salmonids where the TMDL is for temperature or sediment	Regionwide		

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R1-33	Monitor the effectiveness of existing regulatory programs (ACOE, DFG, CDF, USFS, counties, etc.) to prevent the loss of wetlands and riparian habitat and degradation of water quality	Regionwide		
R1-34	Monitor ground water quality for constituents not currently being monitored, such as pesticides, including small, private wells	Regionwide		
R1-35	Effectiveness monitoring of implementation projects and activities to determine impacts on aquatic species and other beneficial uses	Regionwide		
R1-36	Implement and utilize citizens' monitoring or establish a volunteer monitoring network to track effectiveness of management measures and establish baseline conditions	Regionwide	various	
R1-37	Monitor turbidity, suspended solids, sediment loading and pesticides	Regionwide	1A, 1D	
R1-38	Promote self-monitoring for nutrients and sediment from dairies	Russian/Bodega WMA, Humboldt Bay tributaries, Salmon Creek, Coastal Region	1A, 1C	Named above
R1-39	Conduct trend monitoring for water quality, temperature macroinvertebrates, riparian habitat, gravel quality etc.	So. Fork Trinity River, Shasta River, Lower Klamath tributaries		Named above
R1-40	Land acquisition for growing trees for riparian canopy and irrigation water use, habitat improvement, preservation and restoration and for a buffer from adjacent land use	Green Valley and Atascadero Creeks Albion River Big River Trinity River		Named above
R1-41	Acquisitions of conservation easements, fee title lands and trusts to prevent surface water quality degradation from timber harvest, urban development, and agricultural activities	Regionwide		
R1-42	Land acquisition/easements for road decommissioning	Big River, Jenner Creek		
R1-43	Land acquisition/easements to protect and restore riparian areas	Regionwide		
R1-44	Develop and implement BMPs for noxious weed control in water ways and/or control of invasive plant species	Regionwide		

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R1-45	Implement riparian revegetation and stream canopy enhancement using native plants	Regionwide	6A, 6B	
R1-46	Riparian revegetation, channel protection and animal exclusion zones as set forth in an approved technical TMDL	Russian/Bodega WMA (Stemple, & Americano Watersheds) N.Coast Rivers WMA (Garcia and Navarro Rivera) Coastal Region	1B, 1E, 5.3A, 6A, 6B	Stemple Creek Waste Reduction Strategy (TMDL) Navarro River Restoration Plan Garcia River Waste Reduction Strategy
R1-47	Install streambank stabilization and restoration measures including bioengineering	Regionwide	5.1A, 5.1B, 5.3A, 6B	
R1-48	Large woody debris (LWD) recruitment and placement, and protection of LWD recruitment areas to create fish habitat	Regionwide	5.1B	
R1-49	Implementation of a program to reduce runoff discharges from residential, commercial, and industrial properties and improve stream habitat in a mixed cultural/environmental justice setting	Russian River (Roseland Creek) Coastal Region	3.3, 5.1B	Southwest Santa Rosa Area Plan
R1-50	Install fish screens on diversion outlets	Regionwide	5.1B	
R1-51	Remove fish migration barriers	Regionwide	5.1B	
R1-52	Identify, protect and enhance salmonid refugia in streams	Regionwide	5.1B	
R1-53	Wetland “polishing marsh for storm water runoff from Sebastopol and in the Coastal Region	Russian River (Laguna de Santa Rosa)	6B, 6C	Named above
R1-54	Laguna wetland corridor restoration and wetland bank and provide sediment(nutrient) removal from the tributaries to the Laguna de Santa Rosa	Russian River (Laguna de Santa Rosa)	6A, 6B	Waste Reduction Strategy for Laguna de Santa Rosa; Laguna CRMP
R1-55	Re-create wetlands in flood prone areas and freshwater portions of upper tidal and low gradient channels of coastal streams	Coastal streams	6B	
R1-56	Protect, restore, and enhance wetlands, riparian areas, estuaries and adjacent lands.	Regionwide	6A, 6B	
R1-57	Coordinate permitting efforts and/or streamline permit process for restoration projects	Regionwide		
R1-58	Implement technical TMDLs in cooperative efforts with private and federal landowners	Regionwide	various	
R1-59	Collect and provide information to revise TMDL for EPA approval, revise Enhancement Plan	Stemple Creek		Named above
R1-60	Implement forest fuels reduction management	Trinity River, Salmon	2G	Named above

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		River, Gualala River		
R1-61	Decommission, upgrade, storm proof, restore and maintain roads for erosion control to reduce sediment loading	Regionwide especially in So. Fork Eel River, Mattole River, Redwood Creek, Lindsay Creek, Mad River	3.1, 3.5A, 3.5E, 3.5F	Mattole Salmon Group Five Year Plan, Mattole Restoration Council Elements of Recovery Others named above
R1-62	Conduct parking lot storm water management including porous pavement projects	Regionwide	3.1A, 3.3A	
R1-63	Road erosion control under powerlines, secure utility easement access	Regionwide	3.5F	
R1-64	Use erosion control BMPs in developing and maintaining hiking trails	Regionwide	3.5F	
R1-65	Convert septic systems to sewer systems, develop filtration system for sediment trapping and water re-use	Bodega Bay	3.4A, 3.4B	
R1-66	Implement management practices to reduce off-site movement of NPS pollution in urban areas	Regionwide	3.1A, 3.3A, 3.6A	
R1-67	Protect, restore, and enhance urban streams including but not limited to the use of greenbelts, day-lighting, riparian restoration, buffer zones, and wetlands creation for storage and attenuation	Regionwide	6B, 6C	
R1-68	Implement a nonpoint source public outreach program addressing the requirements of Phase II NPDES storm water permits	Russian/Bodega WMA Coastal Region	3.6A	

